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(54) Title: **ANTIMICROBIAL COMPOUNDS**

(57) Abstract

This invention provides methods for treating a mycobacterial infection by administering to an animal a pharmaceutical composition containing a compound having the formula $R-SO_n-Z-CO-Y$, where R is an alkyl group having 6-20 carbons; Z is a radical selected from $-CH_2-$, $-O-$, and $-NH-$, two of these radicals coupled together, or $-CH_2-CH_2-$; Y is $-NH_2$, $O-CH_2-C_6H_5$, $-CO-CO-O-CH_3$, or $O-CH_3$; and n is 1 or 2. It has been discovered that these compounds inhibit growth of microbial cells which synthesize α -substituted, β -hydroxy fatty acids, particularly corynemycolic acid, nocardic acid, and mycolic acid. These compounds may be used to inhibit growth of mycobacterial cells, such as *Mycobacterium tuberculosis*, drug-resistant *M. tuberculosis*, *M. avium intracellulare*, and *M. leprae*.